FORESTRY, FIRE & STATE LANDS PROPOSAL

Cover Sheet

Project Title	Great Salt Lake microalgae populations as indicator species of habitat quality: Novel methods for monitoring		
Lead Project Sponsor	*Primary Investigator:* Bonnie K. Baxter, Ph.D., Westminster College *Co-PI:* Juergen Polle, Ph.D., CUNY-Brooklyn College		
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Project Description / Abstract	The algae of Great Salt Lake (GSL) are the primary producers of the ecosystem and serve as the first trophic level. Though we currently have work in progress, little has been published on the diversity of these species, and how their population shifts in the lake may impact the brine shrimp and fly populations. Since the avian species, whose life cycle depends on this lake, in turn depend on the invertebrates, understanding the phytoplankton composition and concentrations is a important part of the whole system. We plan to develop cell and DNA-based methodology that will be directly applicable to state algal monitoring programs and the state's *Artemia* industry, augmenting the current methods. We will also provide genetic data on the diversity of algal species of GSL for the first time.		
Project Funding	Amount Requested $ **41,600**	Matching Funds $ 34,243	Total Project Cost $ 75,843